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EXAMINER

THOMAS, JASON

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/686,720	Applicant(s) SHIMIZU, SEIYA	
	Examiner JASON THOMAS	Art Unit 4126	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/17/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claim 10 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Page 31 of the specification suggest that the claimed method can be carried out by a software program and further does not limit the executable program to a physically realizable medium.
2. Claim 11 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. A program not claimed as embodied in computer-readable media is descriptive material per se and is not statutory because it is not capable of causing functional change in a computer.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Art Unit: 4126

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art, in view of Takao et al. (Japan Patent Pub. No. 2001-203977).

Regarding claim 1: applicant discloses prior art which includes a playback apparatus for receiving and playing back a plurality of pieces of video information delivered via a network, the apparatus comprising: a scenario management section (see [fig 11 item 520], [pg. 2 lines 5-9], [pg2. line 13 – pg. 3 line 7], [pg. 3 lines 8-24], [pg. 4 lines 11-18], [pg. 5 lines 2-11]); a communication handling section (see [fig 11 item 510], [pg. 2 lines 5-9], [pg2. line 13 – pg. 3 line 7]); and an output section (see [fig 11 item 540], [pg. 2 lines 5-9]).

Applicant's admitted prior art does not teach the use of a plurality of decoder modules or an output switching section for switching output from the plurality of decoder modules under the switching control.

Takao teaches a plurality of decoder modules and an output switching section for switching output from the plurality of decoders (see [Means for solving problem], [pg. 2 lines 5-9], [pg. 2 lines 5-9], [pg2. line 13 – pg. 3 line 7], [pg. 3 lines 8-24] for using two or more decoders and for a switching control part which controls output change part to switch between decoders).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use multiple decoders and to switch between those decoders to

retrieve the output from said decoders, as taught in Takao, to eliminate discontinuity, as taught by applicant's prior art, because any discontinuity in the data stream can result in either a loss of data or a data freeze.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being obvious over applicant's admitted prior art, in view of Takao and Day et al. (U.S. Patent No. 5,996,015).

Regarding claim 2: Applicant's admitted prior art does not teach wherein the scenario management section determines the playback schedule so that the temporarily adjacent pieces of video information will be played back by the different decoder modules.

Day teaches wherein a video selection presentation formatter program takes selection request, creates a playback schedule, referred to herein as a playlist, and reserves the necessary resources to play the selected videos (see [column 5 lines 30-35], [column 6 lines 26-35]).

Day does not teach where adjacent pieces of video information will be played back by different decoder modules.

Takao teaches a "repetition reproduction preparation directions part" which controls the "output change part" to switch from one decoder to another based on the starting position specified by the "specification part" (see [Means for solving problem], [pg. 2 lines 5-9], [pg. 2 lines 5-9], [pg2. line 13 – pg. 3 line 7], [pg. 3 lines 8-24]).

At the time the invention was made, it would have been obvious for one of ordinary skill in the art to use a playlist which reserves the necessary resources to play selected videos, as taught in Day, to determine when to switch to the appropriate decoder,

as taught in Takao, because in “real time” or “on-the-fly” applications, the initialization processing for sequential video segments will cause gaps, “freezes”, and possibly data loss among other things (see Day [column 6 lines 3-7]).

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant’s admitted prior art, in view of Takao, Branstad (U.S. Patent No. 6,519,716 B1) and Welder (U.S. Patent No. 6,202,190 B1).

Regarding claim 3: Applicant's admitted prior art does not teach wherein the scenario management section selects the plurality of decoder modules which decode the plurality of pieces of video information on the basis of initialization time each of the plurality of decoder modules takes to change from an initial state to a state in which each of the plurality of decoder modules takes to change from an initial state to a state in which each of the plurality of decoder modules can output the plurality of pieces of video information as images and termination time of each of the plurality of decoder modules takes to terminate the output and to return to the initial state.

Branstad teaches the judicious selection of a device based on performance capabilities (see [abstract], [column 2 lines 32-50] where judiciously selecting based on performance capabilities is analogous to selecting a decoder based on its ability to reset quickly).

Welder teaches recording the time required to boot-up and shut-down the operating system on the computer system (see [fig. 6], [abstract], [column 2 lines 26-29], [column 12 lines 14-17] where booting-up and shutting-down are analogous to initializing and terminating a decoder).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to judiciously select a device, as taught in Branstad, based on the time required for initialization (boot-up) and termination (shutdown), as taught in Welder, when using the scenario management section to exert control over a decoder, as taught in applicant's admitted prior art, because by selecting a device based on its performance capabilities a device can be accessed in an optimal manner (see [column 2 lines 45-50]).

6. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art, in view of Takao and Welder (U.S. Patent No. 6,202,190 B1).

Regarding claim 4: Applicant's admitted prior art does not teach wherein the scenario management section has a coefficient store table in which the fixed values of the initialization time and the termination time for each streaming server are stored and distributes the plurality of pieces of video information in advance among the plurality of decoder modules by the use of coefficient values stored in the coefficient store table.

Welder teaches where the boot duration, which includes the boot-up and shutdown time, is stored as a record (see [abstract], [column 12 lines 14-17] where the record of the times required to boot-up and shutdown is equivalent to a coefficient table or set of sorts in that it maintains a record of time values).

Takao teaches a plurality of decoder modules for the display of video (see [Means for solving problem], [pg. 2 lines 5-9], [pg. 2 lines 5-9], [pg2. line 13 – pg. 3 line 7], [pg. 3 lines 8-24] for using two or more decoders).

At the time invention was made, it would have been obvious to one of ordinary skill in the art to maintain a "coefficient table" or record of times, as taught in Welder,

and divide a number of video information among multiple decoders, as taught in Takao, to guide the scenario management in distributing video information, because by using a device based on its performance capabilities a device can be accessed in an optimal manner (see [column 2 lines 45-50]).

Regarding claim 5: Applicant's admitted prior art does not teach wherein the scenario management section has a coefficient store table in which the initialization time and the termination time for each streaming server are updated in order by the use of measured values for the plurality of decoder modules and updates the playback schedule of the plurality of pieces of video information which are not yet displayed at the time of a coefficient value in the coefficient store table being updated.

Welder teaches where the boot duration, which includes the boot-up and shutdown time, is stored as a record and updated periodically (see [abstract], [column 12 lines 14-20] where the record of the times required to boot-up and shutdown is equivalent to a coefficient table or set of sorts in that it maintains a record of time values).

Takao teaches a plurality of decoder modules for the display of video (see [Means for solving problem], [pg. 2 lines 5-9], [pg. 2 lines 5-9], [pg2. line 13 – pg. 3 line 7], [pg. 3 lines 8-24] for using two or more decoders).

At the time invention was made, it would have been obvious to one of ordinary skill in the art to update a "coefficient table" or record of times, as taught in Welder, and divide a number of video information among multiple decoders, as taught in Takao, after having updated the playback schedule by direction of the scenario management section because the times in the record may vary periodically and by using a device based on its

performance capabilities a device can be accessed in an optimal manner (see [column 2 lines 45-50], [column 12 lines 14-20]).

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art, in view of Takao and Cho et al. (5,983,069).

Regarding claim 6: Applicant's admitted prior art teaches a communication handling section that receives scenarios but does not teach wherein the scenarios are received in parts thus requiring the partial scenario to have to be combined and updated before playback in the playback schedule (see [pg2. line 13 – pg. 3 line 7]).

Cho teaches a scenario, referred to herein as a playlist, which can be updated in parts and combined with the pre-existing playlist which controls the video playback (see [column 10 lines 49-54], [column 12 lines 6-14], [column 12 lines 47-50], [column 12 lines 62-67]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to send a partial playlist to be combined with the pre-existing playlist, as taught in Cho, to be received by the communications handling section which would then update the playback schedule, as taught in applicant's admitted prior art, because this provides the user with an opportunity to update the selection if the current playlist is undesired (see [column 12 lines 61-67]).

8. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art, in view of Takao and Day (U.S. Patent No. 5,996,015).

Regarding claim 7: Applicant's admitted prior art teaches wherein the scenario management section is activated to exert control over a decoder module (see [pg. 3 lines

8-24]) but does not explicitly teach wherein it determines a state of each of the plurality of decoder modules according to scenario time, and controls each of the plurality of decoder modules so that each of the plurality of decoder modules will make the transition to the state the scenario management section determined.

Takao teaches using multiple decoders (see [Means for solving problem], [pg. 2 lines 5-9 - pg2. line 13 – pg. 3 line 7]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to control multiple decoders, as taught in Takao, by using the scenario management section, as taught in applicant's admitted prior art, because using a single decoder in the conventional way can spoil the continuity of a moving picture (see Takao [abstract]).

Day teaches wherein the resources needed to deliver and play the selected media are reserved so that at a predetermined point prior to the end of the data stream for a first media segment, an initialization process is begun (see [column 6 lines 26-64] where it is implicit that by reserving resources the available resources and state of those resources must be determined; see also [column 8 lines 49-57] where this methodology can include integrated circuits and the like such as a decoder).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to determine the state, implicit in the steps required to reserve resources, as taught in Day, of multiple decoders, as taught in Takao, before exerting control over the decoder module, as taught in applicant's admitted prior art.

Regarding claim 8: Day teaches wherein the state is determined on the basis of the scenario time and the playback schedule (see [column 6 lines 30-32] for implicitly determining the state by reserving resources; see also [column 6 lines 40-50] where a determination is made based on the scenario time, a predetermined point prior to the end of the first video segment, and the playback schedule, referred to herein as the playlist).

9. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art, in view of Day (U.S. Patent No. 5,996,015).

Regarding claim 12: Applicant admitted prior art teaches a playback method for receiving and playing back plurality of pieces of video information delivered via a network, the method comprising the steps of: reading a playback scenario in which playback information regarding the plurality of pieces of video information is described and which is delivered via the network (see [pg. 2 lines 5-9], [pg2. line 13 – pg. 3 line 7], [pg. 3 lines 8-24]); determining a playback schedule according to the playback information (see [pg. 2 lines 5-9], [pg2. line 13 – pg. 3 line 7], [pg. 3 lines 8-24]).

Applicants admitted prior art does not teach distribution of the plurality of pieces of video information among a plurality of decoder modules and switching control over output from the plurality of decoder modules.

Day teaches a method and implementing a computer system which anticipates implementation on a computer-readable medium (see [column 8 lines 53-57]) to create a playback schedule referred to herein as "playlist" so that segments of video can be placed such that they are temporally adjacent and played back in a continuous stream (see [column 2 lines 29-52], [column 5 lines 30-35], [column 6 lines 26-64]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to temporally place segmented video adjacent to each other on the basis of a playback schedule referred to as a “playlist”, as taught in Day, to manage the switching of a plurality of decoders, as taught in admitted prior art, because exerting control over a decoder module is commonly practiced in conventional streaming video delivery systems (see Shimizu [pg. 3 lines 8-24]).

Regarding claim 13: Applicant admitted prior art teaches a video information playback system for playing back a plurality of pieces of video information delivered via network, the system comprising: a content server (see [fig 11]); a streaming server (see [fig 11]); a client including a plurality of decoder modules (see [fig 11]).

Applicant’s admitted prior art does not teach wherein the client is capable of determining a playback schedule according to the playback information, and by performing, in accordance with the playback schedule, distribution of the plurality of pieces of video information among the plurality of decoder modules and the switching of output from the plurality of decoder modules.

Day teaches implementing a computer system to create a playback schedule referred to herein as "playlist" so that segments of video can be placed such that they are temporally adjacent and played back in a continuous stream (see [column 2 lines 29-52], [column 5 lines 30-35], [column 6 lines 26-64]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to temporally place segmented video adjacent to each other on the basis of a playback schedule referred to as a “playlist”, as taught in Day, to manage the

switching of a plurality of decoders, as taught in admitted prior art, because exerting control over a decoder module is commonly practiced in conventional streaming video delivery systems (see Shimizu [pg. 3 lines 8-24]).

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art, in view of Takao, Day and Adolph et al. (U.S. Patent No. 6,370,323 B1).

Regarding claim 9: Applicant's admitted prior art teaches wherein the scenario management section is able to exert control over a decoder module (see [pg. 3 lines 8-24]) but does not teach wherein if each of the plurality of decoder modules is not in a playback enable state in spite of the determination that the state should be a playback state being made, the scenario management section stops the scenario time until each of the plurality of decoder modules make s the transition to the playback enable state.

Takao teaches using multiple decoders (see [Means for solving problem], [pg. 2 lines 5-9 - pg2. line 13 – pg. 3 line 7]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to control multiple decoders, as taught in Takao, by using the scenario management section, as taught in applicant's admitted prior art, because using a single decoder in the conventional way can spoil the continuity of a moving picture (see Takao [abstract]).

Adolph teaches a decoder which, while not in an enable state, suspends but does not terminate the processing of input data and upon being enabled seamlessly resumes playback (see [column 10 lines 6-23]).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to suspend the playback sequence (scenario time) when the decoder is not enabled, as taught in Adolph, by using the scenario management section to exert control over playback, as taught in applicant's admitted prior art.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Thomson (U.S. Patent No. 5,881,245).
- b. Durana et al. (U.S. Patent No. 6,018,765).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON THOMAS whose telephone number is (571)270-5080. The examiner can normally be reached on Mon. - Thurs., 8:00a.m. - 5:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Chow can be reached on (571) 272-7767. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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